# Montana DEQ Forest Fire Smoke Advisory August 09 2007 10:00 AM Thursday

## **Current Situation**

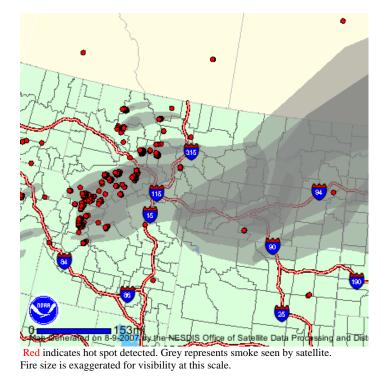
Smoke has poured into Butte all night from the fires in western Montana and Idaho. They are currently seeing <a href="UNHEALTHY">UNHEALTHY</a> levels of smoke this morning. Smoke can be seen trapped in the Rock Creek drainage and the south end of the Seeley/Swan Valley and conditions there are estimated to be <a href="UNHEALTHY">UNHEALTHY</a> as well. Lingering smoke in the northern Flathead and southern Bitterroot valleys has produced <a href="UNHEALTHY FOR">UNHEALTHY FOR</a> <a href="SENSITIVE">SENSITIVE</a> conditions in Whitefish, Kalispell, and Hamilton. <a href="MODERATE">MODERATE</a> conditions are impacting Missoula, Helena, Dillon, Great Falls, Miles City, and Baker. There is a well defined plume of residual smoke aloft visible in an arc spread across eastern Montana and some of this smoke will mix down to the surface later this morning for some temporary impacts. See the forecast below for details. Direct smoke impacts from the active fires in the state are expected to be a problem later today. Residents near active fires or experiencing noticeable smoke levels should use the <a href="VISIBILITY GUIDELINES">VISIBILITY GUIDELINES</a> to determine smoke levels in their area and guide their activity decisions.

Morning satellite photo centered on Great Falls:

G-11 IMG 9 AUG 07 TIME-14-00UTC RES-01.00KM NUS/UR-SSD

20002 G-11 IMG 1 9 AUG 07221 140000 03277 17488 01.00

This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind(the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last nights satellite coverage)



To identify individual fires on graphic above go here: <a href="http://activefiremaps.fs.fed.us/lg\_fire2.php">http://activefiremaps.fs.fed.us/lg\_fire2.php</a>

This satellite photo from 7:45 PM last night shows the big plumes coming off of the fires in Idaho and Montana that left the smoke aloft in the picture above.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

## Updated 10 AM August 09, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

HAZARDOUS	
VERY UNHEALTHY	
UNHEALTHY	Butte T24
	Seeley Lake (est)
	Rock Creek area(est)
UNHEALTHY	Whitefish T24
FOR SENSITIVE GROUPS	Kalispell T24(est)
	Hamilton T24
MODERATE	Helena T8
	Missoula T24
	Great Falls Vis(1)
	Dillon Vis(5)
	Miles City Vis(2)
	Baker Vis(6)

T1(x) One-hour TEOM or BAM value (number of values)
T8(x) Eight-hour average TEOM or BAM value(number of values)

T24 24 hour average TEOM or BAM value Vis(x) Visibility value(number of hours)

Vis(am/pm) Visibility value from twice/day reporting stations

(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local <u>visibility guidelines</u> to evaluate possible health risks and make informed activity decisions.

### **Forecast**

The smoke aloft over central and eastern Montana will mix down to the surface later this morning. This will produce some intermittently strong smoke impacts at the surface in the areas under the thickest parts of the plume. Hazy skies will be common across the state as well. Smoke levels in the communities currently seeing higher smoke impacts will improve as the mixing height rises and the smoke thins out. There will be heavy local plume impacts from the active fires again this afternoon as the fire activity levels increase. Transport winds will be generally from the west and southwest and communities downwind of these fires will need to pay close attention to conditions in their area and use the <u>visibility guidelines</u> to guide their activity decisions as the situation changes.

#### John Coefield

Meteorologist

Montana Department of Environmental Quality